

=> d his

(FILE 'HOME' ENTERED AT 10:55:06 ON 11 MAR 2003)

FILE 'AGRICOLA, ALUMINIUM, ANABSTR, APOLLIT, AQUIRE, BABS, BIOCOMMERCE, BIOTECHNO, CABA, CAOLD, CAPLUS, CBNB, CEABA-VTB, CEN, CERAB, CIN, COMPENDEX, CONFSCI, COPPERLIT, CORROSION, ENCOMPLIT, ENCOMPLIT2, FEDRIP, GENBANK, INSPEC, INSPHYS, INVESTEXT, IPA, ...' ENTERED AT 10:55:21 ON 11 MAR 2003

L1 1306797 AUREOBASID? OR YEAST
L2 4 L1 AND FERM AND 18099
L3 2 DUP REM L2 (2 DUPLICATES REMOVED)

=> d l3 total ibib abs

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1
ACCESSION NUMBER: 2002:488270 CAPLUS
DOCUMENT NUMBER: 137:52341
TITLE: Use of beta glucan from **Aureobasidium** medium
as active agent in pharmaceutical, cosmetic, and food
preparations
INVENTOR(S): Ikewaki, Nobunao; Fujii, Noboru; Onaka, Takashi
PATENT ASSIGNEE(S): Yasushi Onaka, Japan
SOURCE: U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2002082418 | A1 | 20020627 | US 2001-986535 | 20011109 |
| JP 2002204687 | A2 | 20020723 | JP 2001-332459 | 20011030 |

PRIORITY APPLN. INFO.: JP 2000-342310 A 20001109

AB **Aureobasidium** β -1.3-1.6 glucans and compns. containing such glucans, as well as methods of their preparation are disclosed. **Aureobasidium** medium that contains β -1.3-1.6 glucans, particularly medium produced by **Aureobasidium** strain FERM P-18099 are studied. The β -glucans of the present invention have a variety of industrial and com. uses, including applications in pharmaceutical or medical products or treatments, for the removal or control of environmental or microbiol. contaminants, in cosmetics, and in nutritional products and foods. β -1.3-1.6 Glucan (I) was added to various leukemia cells, which were cultured for 1 to 3 days at 37°. Addition of I directly inhibited the proliferation of cancer (leukemia) cells. The data suggested the direct killing of cancer cells, for instance, by induction of programmed death (apoptosis), as other components of the immune system were absent.

L3 ANSWER 2 OF 2 USPATFULL
ACCESSION NUMBER: 2001:208507 USPATFULL
TITLE: Feedstuff additive which contains D-pantothenic acid and/or its salts and a process for the preparation thereof
INVENTOR(S): Binder, Michael, Steinhagen, Germany, Federal Republic of
Uffmann, Klaus-Erich, Bielefeld, Germany, Federal Republic of

PATENT ASSIGNEE(S): Walger, Iiona, Bielefeld, Germany, Federal Republic of
Becker, Ulrich, Seice, Germany, Federal Republic of
Pfefferle, Walter, Halle, Germany, Federal Republic of
Friedrich, Heinz, Hanau, Germany, Federal Republic of
Degussa Aktiengesellschaft, Frankfurt am Main, Germany,
Federal Republic of (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 6319528 | B1 | 20011120 |
| APPLICATION INFO.: | US 2000-686172 | | 20001012 (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1999-431097, filed on 1 Nov 1999, now patented, Pat. No. US 6238714 | | |

| | NUMBER | DATE |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | DE 1999-19920507 | 19990505 |
| | DE 2000-10016321 | 20000331 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Sayala, Chhaya D. | |
| LEGAL REPRESENTATIVE: | Pillsbury Winthrop LLP | |
| NUMBER OF CLAIMS: | 15 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 3 Drawing Figure(s); 3 Drawing Page(s) | |
| LINE COUNT: | 917 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a feedstuff additive based on a fermentation broth obtained by the fermentation of D-pantothenic acid producing microorganisms. The broth contains D-pantothenic acid, one or more salts of D-pantothenic acid, or mixtures thereof. Conversion of the broth to a solid, free-flowing form is achieved by drying or granulation

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 12:51:02 ON 11 MAR 2003)

FILE 'AGRICOLA, ALUMINIUM, ANABSTR, APOLLIT, AQUIRE, BABS, BIOCOMMERCE, BIOTECHNO, CABA, CAOLD, CAPLUS, CBNB, CEABA-VTB, CEN, CERAB, CIN, COMPENDEX, CONFSCI, COPPERLIT, CORROSION, ENCOMPLIT, ENCOMPLIT2, FEDRIP, GENBANK, INSPEC, INSPHYS, INVESTEXT, IPA, ...' ENTERED AT 12:51:17 ON 11 MAR 2003

L1 4 FERM AND 18099
 L2 2 DUP REM L1 (2 DUPLICATES REMOVED)
 L3 2980173 AUREOBASIDIUM OR YEAST OR FUNGI OR FUNGUS
 L4 23741 L3 AND GLUCAN
 L5 253 L4 AND ((1(W)3(W)1(W)6) OR ((1(W)3)(A)(1(W)6)))
 L6 174 DUP REM L5 (79 DUPLICATES REMOVED)
 L7 138 L6 NOT PY>2001
 L8 7 L7 AND AUREOBASIDIUM

=> d 18 total ibib abs

L8 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1998:675185 CAPLUS
 DOCUMENT NUMBER: 130:13419
 TITLE: Manufacture of foods and beverages containing β -1,3-1,6-glucans from *Aureobasidium* species
 INVENTOR(S): Hattori, Hiroshi
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| JP 10276739 | A2 | 19981020 | JP 1997-126169 | 19970409 |
| PRIORITY APPLN. INFO.: | | | JP 1997-126169 | 19970409 |
| AB <i>Aureobasidium</i> sp. culture solns. containing β - 1,3-1,6-glucan of its mixts. with fructooligosaccharides as main components are sterilized, optionally mixed with aqueous alkali hydroxides, and spray-dried to manufacture powders useful as additives for foods and beverages. | | | | |

L8 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1987:642457 CAPLUS
 DOCUMENT NUMBER: 107:242457
 TITLE: β -(1,3)(1,6)-Glucan as a cosmetic additive
 INVENTOR(S): Shinohara, Satoshi; Ueno, Hideo; Hirayama, Michiko; Tomiyasu, Keizaburo
 PATENT ASSIGNEE(S): Bio Bi Daimaru K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent

LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 62205008 | A2 | 19870909 | JP 1986-49273 | 19860305 |
| PRIORITY APPLN. INFO.: | | | JP 1986-49273 | 19860305 |

AB Cosmetics contain β -(1,3)(1,6)-**glucan** as an additive to increase their biocompatibility. The **glucan** is isolated from a culture medium of microorganisms such as Aureobacidium. Skin lotion contained β -(1,3)(1,6)-**glucan** 0.02, propylene glycol 3.0, EtOH 10.0, polyoxyethylene hydrogenated castor oil 0.4, a fragrance 0.6, and H₂O 85.98% by weight

L8 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1986:607835 CAPLUS
 DOCUMENT NUMBER: 105:207835
 TITLE: Cultures containing fructooligosaccharide and β -1,3-1,6-**glucan** for use in beverage manufacture.
 INVENTOR(S): Shinohara, Satoshi
 PATENT ASSIGNEE(S): Shinohara, Satoshi, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 61146192 | A2 | 19860703 | JP 1984-266963 | 19841217 |
| JP 05004063 | B4 | 19930119 | | |
| PRIORITY APPLN. INFO.: | | | JP 1984-266963 | 19841217 |

AB Aureobacidium Species FERM-P 4257, ATCC 20524 is cultured aerobically in a medium containing sucrose 10.00, rice bran 0.01-0.30, vitamin C 0.10-0.20, and vitamin E 0.01-0.10 weight% to yield cultures containing fructooligosaccharide and β -1,3-1,6-**glucan**. Thus, 50 mL seed culture was cultured aerobically at 25° for 48 h. The culture supernatant contained **glucan** 0.45 and fructooligosaccharide 2.20% (glucose 29.4, fructose 16.4, 1-kestose 19.9, niistose (G-F3) 18.0, 1-fructofuranosylkestose 5.4, inulobiose 2.9, and sucrose 7.8%). It is used for preparation of health beverages.

L8 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1985:503455 CAPLUS
 DOCUMENT NUMBER: 103:103455
 TITLE: Enzymic production of fructose-containing oligosaccharides
 PATENT ASSIGNEE(S): Shinohara, Satoru, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 60041497 | A2 | 19850305 | JP 1983-148583 | 19830813 |
| JP 05004070 | B4 | 19930119 | | |

PRIORITY APPLN. INFO.:

JP 1983-148583 19830813

AB Fructosyltransferase [9031-67-8]-producing *Aureobacidium* cells are immobilized by β - 1,3-1,6-**glucan** [53238-80-5], produced in the culture medium, and either Al2(SO4)3 or other compds., and these immobilized bacteria are used to produce inulin-type fructose-containing oligosaccharides, composed mainly of 1-kestose [470-69-9] and nystose [13133-07-8], from sucrose [57-50-1]. The oligosaccharides are sweeteners with no unpleasant aftertaste.

L8 ANSWER 5 OF 7 USPATFULL

ACCESSION NUMBER: 2001:235097 USPATFULL
 TITLE: Fungal antigens and process for producing the same
 INVENTOR(S): Takesako, Kazutoh, Otsu, Japan
 Mizutani, Shigetoshi, Gamo-gun, Japan
 Endo, Masahiro, Kusatsu, Japan
 Kato, Ikunoshin, Uji, Japan
 PATENT ASSIGNEE(S): Takara Shuzo Co., Ltd., Kyoto, Japan (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 6333164 | B1 | 20011225 |
| APPLICATION INFO.: | US 1999-262856 | | 19990304 (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. WO 1997-JP3041, filed on 29 Aug 1997 | | |

| | NUMBER | DATE |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | JP 1996-255400 | 19960904 |
| | JP 1997-99775 | 19970331 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Smith, Lynette R. F. | |
| ASSISTANT EXAMINER: | Baskar, Padma | |
| LEGAL REPRESENTATIVE: | Birch, Stewart, Kolasch & Birch, LLP | |
| NUMBER OF CLAIMS: | 12 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 9 Drawing Figure(s); 9 Drawing Page(s) | |
| LINE COUNT: | 2782 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There can be provided a fungal antigen which is an insoluble fraction obtainable from fungal cells of which cell wall has been substantially removed or at least partially removed; a process for producing the same; a nucleic acid encoding the fungal antigen; a biologic product containing the fungal antigen; a method of stimulating immunological responses by using the biologic product; a method of suppressing allergic reaction to **fungi** in a vertebrate; and a method for diagnosing a disease caused by **fungi** in a vertebrate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 6 OF 7 USPATFULL

ACCESSION NUMBER: 94:44552 USPATFULL
 TITLE: Fructose transferring enzyme absorbed on a granular carrier for production of fructooligosaccharides
 INVENTOR(S): Kono, Toshiaki, Kanagawa, Japan
 Yamaguchi, Goichi, Kanagawa, Japan
 Hidaka, Hidemasa, Kanagawa, Japan
 PATENT ASSIGNEE(S): Meiji Seika Kaisha, Ltd., Tokyo, Japan (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5314810 | | 19940524 |
| APPLICATION INFO.: | US 1992-885001 | | 19920519 (7) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1991-766970, filed on 26 Sep 1991, now abandoned which is a continuation of Ser. No. US 1988-275496, filed on 23 Nov 1988, now abandoned | | |

| | NUMBER | DATE |
|-----------------------|-------------------------------------|----------|
| PRIORITY INFORMATION: | JP 1987-295299 | 19871125 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | Granted | |
| PRIMARY EXAMINER: | Naff, David M. | |
| LEGAL REPRESENTATIVE: | Sughrue, Mion, Zinn, Macpeak & Seas | |
| NUMBER OF CLAIMS: | 21 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 503 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A fructose transferring enzyme is immobilized by adsorption on a granular carrier having a primary to quaternary amine. The carrier is preferably an epoxy polymer, a vinyl polymer or a chitosan derivative having a primary, secondary or tertiary amine. Immobilization can be performed without or with a crosslinking agent. The immobilized enzyme is used for producing fructooligosaccharides by passing a sucrose solution through a column containing the immobilized enzyme.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 7 OF 7 WPIDS (C) 2003 THOMSON DERWENT

ACCESSION NUMBER: 2001-609502 [70] WPIDS
 DOC. NO. CPI: C2001-181636
 TITLE: Sterilization of foodstuffs such as fresh fruits, vegetables and fishes, involves immersing in aqueous solution containing preset amount of **Aureobasidium** culture solution and/or lactic acid, for predetermined time.
 DERWENT CLASS: D13 D16
 PATENT ASSIGNEE(S): (CATS-N) CATS.COM KK; (HEAL-N) HEALTH SUPPORT JAPAN KK; (SOFI-N) SOFIE KK
 COUNTRY COUNT: 1
 PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---------------|------|----------|-----------|----|----|
| JP 2001204445 | A | 20010731 | (200170)* | | 5 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|---------------|----------|
| JP 2001204445 | A | JP 2000-16907 | 20000126 |

PRIORITY APPLN. INFO: JP 2000-16907 20000126

AN 2001-609502 [70] WPIDS

AB JP2001204445 A UPAB: 20011129

NOVELTY - Foodstuffs are sterilized by immersing the foodstuffs in an aqueous solution containing 10-30 weight% (weight%) of **Aureobasidium** culture solution and/or 0.8% or more of lactic acid, for 10 minutes.

USE - For sterilizing fresh fruits, vegetables and fishes.

ADVANTAGE - The sterilization method is simple, harmless to human body and effectively disinfects bacteria adhering to foodstuffs. Since the disinfectant solution contains only minimal amount of acetic and or lactic acid, it does not impairs the taste of the sterilized foodstuffs.

Dwg.0/0

| L Number | Hits | Search Text | DB | Time stamp |
|----------|------|---|---|------------------|
| 1 | 6984 | Aureobasidium or pullulan\$ | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/18 22:11 |
| 8 | 711 | (Aureobasidium or pullulan\$) and glucan | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/18 22:11 |
| 43 | 2661 | glucan with beta | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/18 22:28 |
| 50 | 289 | (Aureobasidium or pullulan\$) and (glucan with beta) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/18 22:29 |
| 71 | 281 | ((Aureobasidium or pullulan\$) and (glucan with beta)) not @ad>20011109 | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/18 22:30 |
| 78 | 56 | ((((Aureobasidium or pullulan\$) and (glucan with beta)) not @ad>20011109) and aureobasidium | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/18 22:30 |
| - | 7 | ((("4562020") or ("6238714") or ("6319528") or ("6333164"))).PN. | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/18 22:10 |
| - | 4 | ((("4965347") or ("5314810"))).PN. | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/11 17:16 |
| - | 2 | ("5789579").PN. | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2003/03/11 17:15 |
| - | 6 | ("4230800" "4276379" "4280954" "4330533" "4420397" "4423150").PN. | USPAT | 2003/03/11 17:15 |
| - | 0 | 5789579.URPN. | USPAT | 2003/03/11 17:16 |
| - | 9 | ("3856775" "3893996" "4225673" "4398023" "4454289" "4454315" "4639516" "4769363" "4774093").PN. | USPAT | 2003/03/11 17:16 |
| - | 6 | 4965347.URPN. | USPAT | 2003/03/11 17:18 |